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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,659	12/11/2003	Jeffery S. Chase	RSW9-2003-0246US1 (7161-1)	8866
7590 12/30/2005			EXAMINER	
Steven M. Greenberg, Esquire Christopher & Weisberg, P.A. Suite 2040 200 East Las Olas Boulevard Fort Lauderdale, FL 33301			PATEL, HETUL B	
			ART UNIT	PAPER NUMBER
			2186	
DATE MAILED: 12/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/733,659	Applicant(s) CHASE ET AL.	
	Examiner Hetul Patel	Art Unit 2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/11/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-16 are presented for examination.
2. The IDS filed on 12/11/2003 has been received and carefully considered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Chase et al. (USPN: 2004/0111514) hereinafter, Chase.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As per claim 1, Chase teaches a method for selecting a cache memory allocation to provide an optimized target cache hit rate in a caching component of a content

delivery system, the method comprising the steps of: identifying a current cache size (i.e. "M") and a contemporaneously experienced trace footprint (i.e. total objects in the request stream, "T"); determining a hit rate produced in response to said current cache size and said contemporaneously experienced trace footprint; computing a Zipf alpha coefficient (i.e. "α") for said current cache size, trace footprint and hit rate (e.g. see paragraph [0037] on page 3); selecting an optimal hit rate; and, further computing an optimal cache size for said Zipf alpha coefficient, trace footprint and optimal hit rate (e.g. see paragraphs [0040], [0042]-[0043]).

As per claim 2, Chase teaches the claimed invention as described above and furthermore, Chase teaches that the step of reconfiguring the cache memory allocation based upon said optimal cache size (e.g. see paragraphs [0042]-[0043]).

As per claim 3, Chase teaches the claimed invention as described above and furthermore, Chase teaches that said computing step comprises the step of computing said Zipf alpha coefficient based upon the equation,

$$HitRate = \frac{1 - m^{1-\alpha}}{1 - T^{1-\alpha}}$$

where α is said Zipf alpha coefficient, m the known size of the cache, T is said trace footprint and HitRate is a contemporaneously experienced hit rate (e.g. see paragraph [0040]).

As per claim 4, Chase teaches the claimed invention as described above and furthermore, Chase teaches that said determining step comprises parsing a log of

server activity (i.e. services offered by the web hosting environment) to identify said hit rate (e.g. see paragraph [0010]).

As per claim 5, Chase teaches the claimed invention as described above and furthermore, Chase teaches that said identifying step comprises the step of identifying a current cache size (i.e. "M") and a contemporaneously experienced trace footprint (i.e. total objects in the request stream, "T") for a cluster of servers (i.e. the web servers) (e.g. see paragraph [0009] and [0040]).

As per claim 6, Chase teaches the claimed invention as described above and furthermore, Chase teaches that said identifying step comprises the step of identifying a current cache size (i.e. "M") and a contemporaneously experienced trace footprint (i.e. total objects in the request stream, "T") for a single content delivery server (i.e. the single web server) (e.g. see paragraph [0009] and [0040]).

As per claim 7, Chase teaches a system for selecting a cache memory allocation to provide an optimized target cache hit rate in a caching component of a content delivery system (e.g. see paragraph [0002] and the abstract). Chase further teaches about computing a Zipf alpha coefficient parameter (i.e. " $\alpha$ ") and an optimal cache size (i.e. "M") for a cache memory (e.g. see paragraphs [0035]-[0038]). Therefore, there have to be, a Zipf alpha coefficient parameter computation processor for computing " $\alpha$ " and an optimal cache size computation processor for computing "M", inherently present in the system taught by Chase. Furthermore, both of these processors have to be communicatively linked/connected to the cache in order to calculate " $\alpha$ " and "M" for the cache memory.

As per claim 8, Chase teaches the claimed invention as described above and furthermore, Chase teaches about parsing a log of server activity/statistics (i.e. services offered by the web hosting environment) to identify a hit rate for the cache memory (e.g. see paragraph [0010]). Therefore, there has to be a server log inherently present in the system for storing server activity/statistics. Furthermore, the Zipf alpha parameter computation processor and a server log have to be communicatively linked/connected to each other so the hit rate can be communicated to the Zipf alpha parameter computation processor.

As per claims 9 and 10, see arguments with respect to the rejection of claim 3. Claims 9 and 10 are also rejected based on the same rationale as the rejection of claim 3.

As per claims 11-16, see arguments with respect to the rejection of claims 1-6, respectively. Chase teaches that the method steps described in paragraphs [0029]-[0049] can be provided as methods, systems or computer program products (e.g. see paragraph [0050]) and can be implemented by computer program instructions (e.g. see paragraph [0051]). Claims 11-16 are also rejected based on the same rationale as the rejection of claims 1-6, respectively.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2186

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hetul Patel whose telephone number is 571-272-4184. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*HBP*  
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**MATTHEW D. ANDERSON**  
**PRIMARY EXAMINER**